

A NEW SPECIES OF KARSCHIIDAE (SOLIFUGAE, ARACHNIDA) FROM KAZAKHSTAN

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The new solpugid species *Karschia mangistauensis* of the family Karschiidae is described from material collected in south-western Kazakhstan. The relationship of the new species is given, as well as the list of solpugids currently known from Kazakhstan.

En se basant sur le matériel récolté au Sud-Ouest du Kazakhstan on décrit une nouvelle espèce de solifuge *Karschia mangistauensis* de la famille Karschiidae. On donne les affinités de la nouvelle espèce aussi que la liste des solifuges connues à présent au Kazakhstan. □ *Solpugids, Karschiidae, Karschia, Kazakhstan.*

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The solpugid fauna of Kazakhstan is poorly known. Only 13 species were recorded from the region by Birula (1938): these are *Karschia zarudnyi* Birula, *Eusimonia turkestanica* Kraepelin, *Anoplogylippus dsungaricus* Roewer, *A. rickmersi* (Kraepelin), *Hemigylippus lamelliger* Birula, *Galeodes araneoides* Pallas, *G. turkestanus* Kraepelin, *G. caspius* Birula, *G. fuscus* Birula, *G. pallasi* Birula, *Paragaleodes heliophilus* Heymons, *P. pallidus* Birula and *Daesia rossica* Birula.

The present paper concentrates on material collected from Mangyshlak and Ustyurt Plateaus (south-western Kazakhstan). Solpugids were preserved and studied in 70% alcohol using a binocular microscope MBS-1. Their determination was done according to Walter (1889), Birula (1938) and Roewer (1932-1934, 1941).

MORPHOLOGY AND BIOLOGY Family KARSCHIIDAE

Karschia mangistauensis sp. nov. (Figs 1-10; table 1)

MATERIAL EXAMINED

TYPES. Holotype ♂, Zhylandy Cape, Yeraliev District, Mangyshlak Plateau, Mangistau Area, South-Western Kazakhstan, (43°06'N, 51°39'E), 2 May 1991, A.V. Gromov. Paratypes: South-Western Kazakhstan: Mangistau Area: Mangyshlak Plateau: 2 ♂, 2 ♀, same data, except 2-4 May 1991, K.U. Balmukanov, A.V. Gromov, K.B. Dzhankurazov; 1 ♂, Aktau City [Shevchenko], (43°11'N, 51°39'E), 28 April 1991, K.U. Balmukanov; Ustyurt Plateau: 1 ♂,

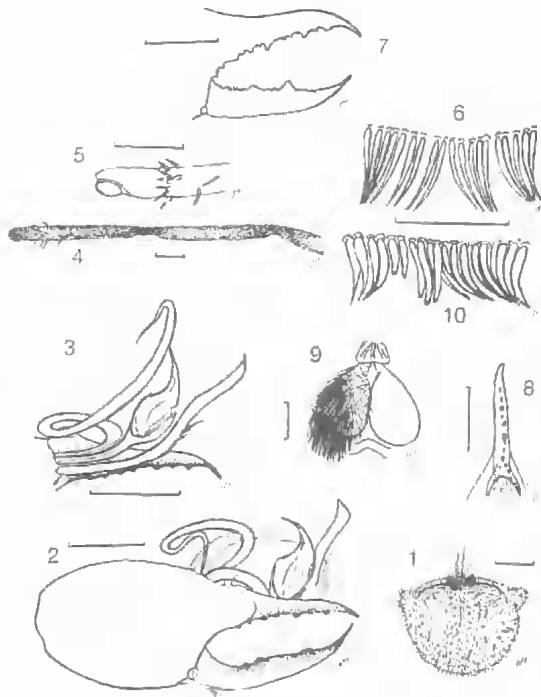
Kugusem Well, 68.5 km E of Akkuduk Village, Yeraliev District, (43°10'N, 54°53'E), 2-5 May 1990, S.I. Ibraev; 1 ♀, Sulykkyzylsai Well, 69.5 km NE of Akkuduk Village, Mangistau District, (43°28'N, 54°43'E), 12 May 1991, E.E. Kopdykbaev. Holotype and 1 ♀ paratype preserved in Zoological Institute, St Petersburg [Leningrad], the remaining material in the author's collection.

DIAGNOSIS

The new species is closely related to *Karschia cornifera* Walter, 1889 from Turkmenistan, from which it differs by the colouration, by the shape of upper modified mesolateral seta near the base of cheliceral fingers, by the number of teeth on the fixed finger and by the spinulation of pedipalps.

DESCRIPTION

Male (holotype). Total length 21 mm. Body colouration light yellow-brown, with greyish head and thorax and grey-yellow abdomen with darker tergites. Chelicerae yellow, distally including brownish-black teeth. Pedipalps (Fig. 4): proximal part of femur yellow, distal part of femur and the remaining segments greyish. Legs yellow. Ocular tubercle (Fig. 1) dark, with numerous hairs, sparse short setae and 2 long setae. Near the base of the cheliceral fingers there is a mesal row of long setae: the upper two are strongly modified and thickened (Figs 2, 3). Armature of pedipalps (Fig. 5): protarsus (basitarsus, metatarsus auct.) with 9 promesolateral spines, tarsus with 1 mesobasal spine. Third abdominal segment with 46 broad ctenidia, fourth one with 19 ctenidia (Fig. 6).



FIGS 1-10. *Karschia mangistauensis*, sp. nov. 1-6, male; 7-10, female. 1, propeltidium, dorsal view. 2, right chelicera, ectal view. 3, modified setae near base of fingers, and flagellum on left cheliceral fixed finger, mesal view. 4, 5 right pedipalp, mesoventral view; coloration (4); spinulation (5). 6, ctenidia on fourth sternite of abdomen, ventral view. 7, right chelicera, ectal view. 8, right cheliceral fixed finger, ventral view. 9, genital opercula, ventral view. 10, ctenidia on fourth sternite of abdomen, ventral view. Scale line = 1 mm.

Body length of paratypes 17-21 mm, number of promesolateral spines 6-10, mesobasal spine of tarsus sometimes absent, fourth abdominal segment with 17 or 19 ctenidia.

Female paratype. Body colouration lighter than in male, with darker pedipalps. Distal part of femur IV light brown. The head behind ocular tubercle with slight longitudinal light brown line. Ocular tubercle as in male, occupying less than 1/3 of clypeus width. Fixed fingers are straight from above, their length no more than the width of chelicerae. Armature of chelicerae as in Figs 7, 8. Genitalia (Fig. 9) with pale rosy ectolateral setae. Fourth abdominal segment with 19 pale rosy ctenidia which are thicker than in male (Fig. 10).

	Length
Chelicerae	4.4, 1.6 wide
Propeltidium	2.4, 3.5 wide
Pedipalp: total (with coxa)	18.2
tibia	4.9
basitarsus	3.8
Leg I (with coxa)	14.1
Leg II (with coxa)	12.4
Leg III (with coxa)	16.6
Leg IV (with coxa)	25.3

TABLE 1. Measurements (in mm) of *Karschia mangistauensis*, sp. nov.

BIOLOGY

Night solpugid in clayey desert under stones during day.

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